

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in this application. Added text is indicated by underlining, and deleted text is indicated by ~~strikethrough~~. Changes are identified by a vertical bar at the left edge of text.

Listing of Claims:

1-14. (canceled).

15. (canceled).

16-22. (canceled)

1 23. (currently amended) A storage system for processing a command
2 transmitted by a host computer, said storage system comprising:
3 a storage apparatus to which the host computer is connected by a network and
4 which stores data to be processed in accordance with said command;
5 means for receiving an iSCSI login request transmitted from the host computer;
6 means for determining a first determination whether or not a source address
7 included in an IP header of the iSCSI login request is an IP address in the same network as a port
8 of the storage apparatus;
9 means for obtaining a MAC address assigned to the port of the host computer
10 when the source address included in the IP header is not an IP address in the same network as the
11 port of the storage apparatus as a result of the first determination;
12 means for determining a second determination whether or not the MAC address
13 has been cataloged in an access management table that defines the MAC addresses identifying
14 the host computer by IP address;
15 means for approving an access by said iSCSI login request from the host
16 computer to the storage apparatus when the MAC address has been cataloged in the access
17 management table as a result of the second determination;

18 means for determining a third determination whether or not a logical unit (LU)
19 specified by the command has been cataloged in the access management table as the LU
20 associated with the source IP address of a frame included within the command;

21 means for performing said second determination and said third determination in
22 accordance with a source MAC address in the frame of the iSCSI login request sent from said
23 host computer and cataloged in said access management table; and

24 means for accessing the LU to process the command when said LU has been
25 cataloged in the access management table as a result of the third determination;

26 wherein a MAC address is obtained from said host computer by adoption of a
27 protocol based on an iSCSI text mode negotiation.

1 24. (previously presented) A storage system according to claim 23, wherein a
2 request is given to a SNMP manager that transmits a request to the host computer to acquire a
3 Management Information Base data for the source IP address included in the iSCSI login request
4 to obtain the MAC address.

1 25. (previously presented) A storage system according to claim 23, wherein a
2 MAC address is obtained from said host computer by adoption of a protocol based on an iSCSI
3 text mode negotiation.

1 26. (previously presented) A storage system according to claim 23, further
2 comprising:

3 a control memory for recording log data that the iSCSI login request has been
4 made from a port of another network when the source address included in the IP header were not
5 the IP address in the same network as the port of the storage apparatus according to said the first
6 determination means.

1 27. (previously presented) A storage system according to claim 24, further
2 comprising:

3 means for determining whether or not a predetermined time has lapsed without a
4 response received from the host computer, wherein said second determination is performed if the
5 storage apparatus receives an SNMP response to a SNMP request to the host computer without
6 causing a timeout.

1 28. (previously presented) A storage system according to claim 23, further
2 comprising,
3 a control memory for recording log data indicating that the access from said host
4 computer has not been approved therein,
5 wherein processing of the command is not carried out if the requested access is
6 determined to be a disallowed access to the LU by the third determination means.

1 29. (currently amended) An access control management method for
2 processing a command comprising an access request transmitted by a host computer to a storage
3 apparatus by way of a network, said access control management method comprising the steps of:
4 receiving an iSCSI login request transmitted from the host computer;
5 determining a first determination as to whether or not a source address included in
6 an IP header of the iSCSI login request is an IP address in the same network as a port of the
7 storage apparatus;
8 obtaining a MAC address assigned to the port of the host computer when the
9 source address included in the IP header is not an IP address in the same network as the port of
10 the storage apparatus as a result of the first determination;
11 determining a second determination as to whether or not the MAC address has
12 been cataloged in an access management table that defines the MAC addresses identifying the
13 host computer by IP address;
14 approving an access by said iSCSI login request from the host computer to the
15 storage apparatus when the MAC address has been cataloged in the access management table as
16 a result of said second determination;

17 determining a third determination as to whether or not a logical unit (LU)
18 specified by the command has been cataloged in the access management table as the LU
19 associated with the source IP address of a frame included within the command;
20 performing said second determination and said third determination in accordance
21 with a source MAC address in the frame of iSCSI login request sent from said host computer and
22 cataloged in said access management table; and
23 accessing to the LU to process the command when said LU has been cataloged in
24 the access management tables as a result of the third determination;
25 wherein a MAC address is obtained from said host computer by adoption of a
26 protocol based on an iSCSI text mode negotiation.

1 30. (previously presented) An access control management method according
2 to claim 29, wherein a request is given to a SNMP manager that transmits a request to the host
3 computer to acquire an MIB for the source IP address included in the iSCSI login request to
4 obtain the MAC address.

1 31. (previously presented) An access control management method according
2 to claim 29, wherein log data that the iSCSI login request has been made from a port of another
3 network is recorded in a control memory if the source address included in the IP header were not
4 the IP address in the same network as the port of the storage apparatus according to said the first
5 determination.

1 32. (previously presented) An access control management method according
2 to claim 30, further comprising:
3 determining whether or not a predetermined time has lapsed without a response
4 received from the host computer, wherein said second determination is performed if the storage
5 apparatus receives an SNMP response to a SNMP request to the host computer without causing a
6 timeout.

1 33. (previously presented) An access control management method according
2 to claim 29, wherein log data indicating that the access from said host computer has not been
3 approved is recorded in a control memory and processing of the command is not carried out if
4 the requested access is determined to be a disallowed access to the LU on the third
5 determination.